

The Claims

What is claimed is:

5 1. A foodstuff having creamy to pasty characteristics comprising one or more biopolymers and water and having a homogeneous microstructure wherein the biopolymers are present in a very fine microscopic distribution and without discernible coarse clusters.

10 2. The foodstuff of claim 1 further comprising one or more constituents selected from the group consisting of nutrients, flavorings, aromas, colorings, structure-forming agents, dietary fibers and combinations thereof, wherein
15 part of the water of the freeze-texturized product is bound more closely to the constituent(s) of the foodstuff than in a conventional foodstuff.

20 3. The foodstuff of claim 1, wherein the biopolymers are proteins or polysaccharides.

4. The foodstuff of claim 3, wherein the proteins are milk proteins and the polysaccharides are hydrocolloids.

25 5. The foodstuff of claim 4, wherein the hydrocolloids are xanthan, carrageenan, or microcrystalline cellulose, the biopolymers are present in an amount in the range from 0.01 to 30% by weight, and optionally containing fats in an amount of up to 30% by weight.

30 6. The foodstuff of claim 1, in the form of a creamy mixture.

35 7. The foodstuff of claim 6, in the form of a sweet cream dessert or a cream product having a savory or spicy flavor.

8. The foodstuff of claim 1, having a phase angle of at least 8 degrees over a frequency of between 0.1 and 1 Hz.

9. An aseptically packaged foodstuff comprising a
5 sterilized foodstuff according to claim 1.

10. A method for producing a creamy to pasty foodstuff comprising biopolymers and water and optionally containing additional constituents, which process comprises:

10 mixing the constituents of the foodstuff to form a starting mixture of liquid to pasty consistency;
cooling the starting mixture to a product temperature of below 0°C with simultaneous continuous mixing and without aeration to produce a freeze-texturized homogenous mixture
15 of the constituents of the foodstuff; and
allowing the product temperature to rise to a distribution and consumption temperature of 4°C and above.

11. The method of claim 10, wherein the cooling is conducted to provide a homogeneous microstructure wherein the biopolymers are present in a very fine microscopic distribution and without discernible coarse clusters.

12. The method of claim 10, wherein the mixing is carried out as stirring under shearing conditions, and the cooling is performed to a product temperature of -3°C to -4°C.

13. The method of claim 1, wherein the cooling is conducted to provide the foodstuff with a phase angle of at least 8 degrees over a frequency of between 0.1 and 1 Hz.

14. The method of claim 10, wherein the starting mixture, before mixing and cooling, is homogenized, pasteurized or sterilized by a UHT treatment.

15. The method of claim 10, wherein the freeze-texturized homogenous mixture is packaged.

16. The method of claim 15, wherein the packaged foodstuff is sterilized or pasteurized by heating in the package.

5 17. The method of claim 10, wherein the constituents include one or more constituents selected from the group consisting of nutrients, flavorings, aromas, colorings, structure-forming agents, dietary fibers and combinations thereof, and wherein part of the water of the freeze-
10 texturized product is bound more closely to the constituent(s) of the foodstuff than in a conventional foodstuff.

15 18. The method of claim 17, wherein the constituents are introduced into the starting mixture in a milk or an aqueous solution.

20 19. A creamy to pasty foodstuff produced by the method of claim 9.

20 20. An aseptically packaged creamy to pasty foodstuff produced by the method of claim 14.

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